

## **REMARKS**

Favorable reconsideration and allowance of this application are requested.

As a procedural note, the present amendment is being filed concurrently with a formal Request for Continued Examination (RCE) under 37 CFR §1.114. Accordingly withdrawal of the "finality" of the June 12, 2008 Official Action is in order so as to allow entry and consideration of the amendments and remarks presented herewith.

### **1. Discussion of Claim Amendments**

By way of the amendment instructions above, pending independent claim 1 has been further revised so as to include therein the substance of prior claim 6. As such, claims 6 and 11 have been cancelled as redundant.

In addition, claim 1 now requires that the mixture be cooled to obtain solid particulate melamine having a  $D_{90}$  of between 10  $\mu\text{m}$  to 1000  $\mu\text{m}$ . Support for such amendment can be found in the specification as originally filed on page 4, lines 21-27.

Therefore, following entry of the amendment instructions above, claims 1-5 and 7-10 and 12-13 will remain pending herein.

### **2. Response to 35 USC §103(a) Rejections**

The Examiner has persisted in his rejection of claims 1-13 under 35 USC §103(a) as allegedly being "obvious" and hence unpatentable over Coufal in view of Van Hardeveld (USP 4,408,046). Applicants again emphatically disagree.

Applicants note that the rejection appears to be an oversimplified combination of prior art references, the combination of which is unjustified under 35 USC §103(a). Specifically, as has been noted previously, both the Coufal and Van Hardeveld

references disclose the mixing of melamine streams which are obtained from the same – **not** different – production processes for making melamine.

More specifically, the Coufal reference discloses a solidification process in a fluidized bed reactor wherein already solidified melamine is used as starting granules – a common technique in any well-known spray drying process. However, this does not mean that the Coufal reference teaches to use two different melamine streams. The Coufal reference teaches to use a spray drying process which inherently leads to the result that already solidified melamine is brought into contact with a finely divided solution of melamine. Without the knowledge of the present invention no person skilled in the art would interpret the disclosure in the Coufal reference as a teaching that two different melamine streams from two different processes for producing melamine are combined.

The same applies to the Van Hardeveld reference. As is evident from the broadest description of Van Hardeveld under Summary of the Invention, as well as claim 1, it is apparent that the Van Hardeveld reference relates to a process for the preparation of melamine wherein on the purification of the product a recycle stream is obtained that is returned into the process. Consequently the Van Hardeveld reference is concerned with optimizing the purification of melamine and thereby a stream is obtained that is recycled. Therefore again, like with the Coufal reference, only after knowing the present invention that envisions combining melamine streams from two different processes a person skilled in the art would interpret the disclosure in the Van Hardeveld reference as a combination of two melamine streams resulting from the same – **not** different – process for the preparation of melamine. But the purpose of returning the recycle stream in the Van Hardeveld reference is not to improve product properties but instead to make the process more energy-efficient.

It is true that the Van Hardeveld reference discloses that different processes for the preparation of melamine from urea exist, such as the high-pressure or medium or low-pressure processes. That different processes for making melamine exist was in any event well known to the person skilled in the art. However, the Van Hardeveld reference clearly does not teach in the direction to combine melamine streams from two different processes for the preparation of melamine. And it cannot be concluded from the sole fact that if in a reference, well known art-recognized information is given, such information would then lead a person skilled in the art to combine melamine streams from two different processes for the preparation of melamine.

To the contrary, the Van Hardeveld reference clearly teaches that the optimized process for purification disclosed therein can be used for *either* known process for the preparation of melamine, as disclosed at col. 2, lines 25-30 of the Van Hardeveld reference. Consequently, the Van Hardeveld reference even teaches away from combining melamine streams from two different processes for the preparation of melamine. First of all, the Van Hardeveld reference clearly identifies that there are different processes for the preparation of melamine and, furthermore, makes it clear that his purification process can be applied to any of the known processes for the preparation of melamine. This clearly excludes the possibility to combine two processes for the preparation of melamine. That is, the processes are kept separate according to the teaching of Van Hardeveld and are combined with the process for the purification of melamine.

The question of obviousness under 35 USC §103(a) must be analyzed on basis of whether a person of ordinary skill in the art, reading the prior art references without knowing the present invention, would be lead or otherwise arrive at the present invention. This is clearly not the case here since the Examiner has apparently

impermissibly interpreted the prior art with knowledge of the present invention. Such hindsight analysis is to be strictly avoided.<sup>1</sup>

Furthermore, referring to the amended version of claim 1 presented above, the present invention has now been defined as an embodiment that is commensurate with the data in the originally filed specification. In this regard, from the examples and the comparative examples it is evident that by combining two melamine streams from a high-pressure liquid phase process and from a low-pressure gas phase process melamine is obtained having different product properties compared to a melamine that is obtained using only a stream from one preparation process. In this regard, please compare specifically examples I and II with the comparative experiment. As can be seen from the experimental data examples I and II according to the present Invention were conducted under the same process conditions with respect to temperature, concentration, and water content as the comparative examples. Consequently, the differences in properties can only be attributed to the fact that examples I and II were made by mixing two melamine streams from a gas phase process and a liquid phase process, respectively. Surprisingly, melamine having a considerably different particle size distribution is obtained. Especially, the particles obtained in the process according to the present Invention have a much smaller particle size as compared to the particle size of melamine obtained **separately** from each of the high-pressure liquid phase process and the low-pressure gas phase process, respectively. This comparatively lesser particle size has a tremendous effect on the final use of the melamine, especially the dissolution time during resin preparation which is much longer for the comparative experiment compared to examples I and II.

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<sup>1</sup> The Federal Circuit regards hindsight as an insidious and powerful phenomenon and is a tempting, but forbidden zone in the inquiry of addressing the statutory obviousness standard. See, e.g., *Panduit Corp. v. Dennison Mfg. Co.*, 227 USPQ 337 (Fed. Cir. 1985) and *Loctite Corp. v. Ultraseal Ltd.*, 228 USPQ 90, 98 (Fed. Cir. 1985).

There is not the slightest hint within the cited prior art references that this surprising effect can be obtained if two melamine streams originating from a low-pressure gas phase process and a high-pressure liquid phase process, respectively, are combined. Consequently, pending claim 1 and the claims dependent therefrom cannot be considered "obvious" under 35 USC §103(a) based on the combination of the Coufal and Van Hardeveld references.

Withdrawal of the rejection advanced against the pending claims based on 35 USC § 103(a) is therefore in order.

### **3. Fee Authorization**

The Commissioner is hereby authorized to charge any deficiency or credit any overpayment in the fee filed, or asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by the attorneys of Customer No. 23117 to Account No. 14-1140.

Respectfully submitted,

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